

Appl. No. 10/536,921
Response to Office Action of April 6, 2006

PATENT
Docket No.: DE020295
Customer No. 000024737

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended) An X-ray system having comprising:

_____ at least one component (12, 2, 31, 32) that is shiftable (moveable) displaceable or pivotable along at least one traverse path to at least one predetermined locking position (Bx);

_____ a braking means, wherein the braking means comprises an electromagnetic brake that is (i) active in a de-energized state and (ii) released by feeding current to the electromagnetic brake; and, and having

_____ a control unit (122) for sensing [[a]] an instantaneous speed of the component (12, 2, 31, 32) when displaced or pivoted along the traverse path within at least one predetermined window of the traverse path, the at least one predetermined window being defined by two positions of the traverse path situated laterally from and disposed about the at least one predetermined locking position, the at least one predetermined window having a widthwise size selected as a function of a mass of the at least one component, the control unit further and for activating [[a]] the braking means (124) if in response to (i) the speed is within the predetermined window being below a predetermined limiting value and (ii) the component (12, 2, 31, 32) has having reached (a) the locking position (Bx) or (b) shortly before this the locking position.

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2. (currently amended) An X-ray system as claimed in claim 1, having further comprising:

_____ a position-sensing unit (123) connected to the control unit (122), wherein responsive to distance signals transmitted by the position-sensing unit, the control unit is further for determining the location of the component (12, 2, 31, 32) relative to a locking position and for calculating the speed of the component (12, 2, 31, 32).

3. (currently amended) An X-ray system as claimed in claim 2, in which wherein the position-sensing unit (123) is provided to measure distance by emitting an acoustic or optical signal and to receive the signal reflected from a point of reference (W).

4. (currently amended) An X-ray system as claimed in claim 2, in which wherein the control unit is provided to control the breaking braking means during the slow down of the component with respect to (i) the component's speed and to (ii) the component's distance to the locking position.

5. (currently amended) An X-ray system as claimed in claim 1, in which wherein the at least one locking position (Bx) is situated within a predetermined window (A-C) of the traverse path and the speed of the component (12, 2, 31, 32) is sensed within this window comprises a widthwise size that is less than the entire traverse path.

6. (currently amended) An X-ray system as claimed in claim 5, having claim 1, further comprising:

_____ an audio and/or visual signal transmitter (125) that is connected to the control unit (122), for generating a first signal when in response to the speed is being below the limiting value and a second signal when in response to the speed is being above the limiting value.

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7. (currently amended) An X-ray system as claimed in claim 1, having further comprising:

_____ a visual display for indicating an instantaneous location of the component (12, 2, 31, 32) relative to a locking position (Bx).

8. (canceled)

9. (currently amended) An X-ray system as claimed in claim 1, in which wherein the control unit (122) has comprises a microprocessor unit, and a memory, wherein the control unit stores in which at least one locking position (Bx) can be stored in the form of a distance from a point of reference in the memory.

10. (currently amended) An X-ray system as claimed in claim 9, in which wherein the at least one locking position of the component (12, 2, 31, 32) that is comprises a user selected by a user can be stored as a locking position (Bx) locking position.

11. (currently amended) An X-ray stand for an X-ray system as claimed in claim 1, in which wherein the component is comprises a part of the a stand that can be configured for being displaced and/or pivoted along a traverse path, and/or an X-ray tube (2) or X-ray generator (2, 21) that can be configured for being displaced and/or pivoted along a traverse path.

12. (currently amended) A patient table for an X-ray system as claimed in claim 1, in which wherein the component is comprises a table top (32) that can be configured for being displaced and/or pivoted along a traverse path, and/or a film cassette (31) that can be configured for being displaced and/or pivoted along a traverse path.